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PLANNING FOR DEVELOPMENT IN A MINERAL-BASED ECONOMY

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Introduction:

A deeply structured dualism typically characterizes third world mining economies. A relatively small percentage of the national labor force, working in an isolated enclave, employs modern, highly complex, capital-intensive machines and equipment to dig out rich minerals and freights them in high-powered trains or trucks to foreign factories. The managers of the mines import almost all the inputs: the machinery, the materials used for construction of the mines, the workers' houses, the roads -- even the foodstuffs the workers eat.

Outside the mining enclaves, the great majority of the populations, mostly peasants, commonly live in grinding poverty. Few can afford to buy any of the final products fabricated from their nation's mineral wealth in faraway lands. Their main hope for escape is to migrate to overcrowded slums adjacent to the mines, joining the growing ranks of unemployed looking for paid jobs...

The mines gear the national economy to the fluctuations of an uncertain world market. They produce a major share of the government's revenues. When prices for exported ores rise, those sectors associated with the mines boom. The government spends augmented revenues to build schools, hospitals, roads. Construction industries hire workers who buy food and clothing, stimulating local factories or, more often, expanding imports. But when mineral prices fall, the entire economy stagnates. The government must borrow money to pay on-going expenses, incurring heavy international debts. Frequently, it must request International Monetary Fund assistance -- and accept the 'austerity' measures the orthodox IMF doctors advise. Slash government expenditures and employment, devalue currencies

(thus raising the cost of imported goods on which the economy has come to depend) and raise taxes, especially on middle and lower income families.

This chapter aims to summarize the evidence as to the causes of this pattern of externally dependent dualism which condemns the majority of the populations of mining economies to poverty. On that foundation, it will outline the kinds of policies which the experience of the independent countries of Africa suggest may be most likely to help overcome them.

The explanations:

The transnational mining companies which establish most mining enclaves in third world nations primarily seek raw materials for their own factories in their home countries. They introduce machinery and equipment embodying the most advanced technologies developed in their factories at home, ensuring their control over the mining projects and their outputs competitiveness in the world market. They control the international marketing networks through which they sell the ores. They frequently own the factories which fabricate the final products. They keep their eyes on the bottom line: the maximization of their global profits. They drain investable surpluses from the project directly in the form of profits, dividends, interest, high salaries and/or managing and licencing fees for the technologies they introduce -- sometimes totalling as much as a third of the mining economy's national product. If government demands too high a share of profits through taxes or ownership of shares, they may siphon profits out indirectly by raising the cost of imported machinery and equipment and/or lowering the prices paid by their international marketing network of the exported crude or semi-refined ores.

Where an independent government seeks to augment the national

returns from the mines, it typically fails to take adequate measures to create a new pattern of self-sustained growth by initiating a transformation to a balanced, integrated economy capable of providing increasingly productive employment opportunities and raising living standards in every sector. Instead, when world mineral prices are high, it tends to spend its augmented revenues on expansion of the civil service to provide roads, schools, hospitals, energy projects -- the infrastructure which western orthodoxy recommends to stimulate private investments productive activities. The government has been structured to pursue this advice: Its ministries know how to build schools, roads, hospitals, energy projects. Its personnel have been schooled to believe that the civil service should not enter into productive sector activities. If government ever should enter the latter, it should do so through parastatals, autonomous state corporations which behave as much as possible like private enterprise.

But private investors -- whether domestic or foreign -- invest in those areas of the already distorted economy where shortterm profits will be highest: speculative trade and real estate and a limited range of import-substitution industries catering to the needs of the narrow high income elite (typically located in the export enclave, using imported machines and materials and providing few jobs). And government-created parastatals, seeking to stimulate industrial growth -- often with no other criteria than to attempt to maximize profits -- not infrequently follow suit. ¹³

Meanwhile, the government has created new high paying posts for growing numbers of civil servants staffing the growing number of new infrastructural posts. If it establishes parastatals, their managers, acting autonomously, may increasingly

like a state within a state: they make decisions as to whom to employ, what to produce, and how to produce it. They often rely on the advice of foreign 'partners' eager to sell them new technologies and semi-processed materials.

Nobody planned it that way, but a 'bureaucratic bourgeoisie' and associated 'managerial bourgeoisie' have emerged. Not infrequently, these individuals take advantage of their new posts to line their own pockets: They discover that they can obtain 10 percent on contracts with foreign partners; they borrow money from banks to finance their entry into speculative real estate and trade, taking advantage of inside knowledge; and channel government funds into their own projects. But the growth of the bureaucratic/managerial bourgeoisie is not caused by corruption; corruption is a by-product of the emergence of a bureaucratic/managerial bourgeoisie: top level government civil servants and parastatal personnel, appointed within the framework of inherited institutions, operating on the lines of conventional wisdom, who benefit from as well as become the key actors shaping government policies.

Then the bubble of mining prosperity inevitably bursts. Transnational corporations reinvest their accumulated profits in new technologies at home that reduce the necessity for the mineral exports on which the mining economies depend. Scrap metals replace ores. Synthetics replace metals. In recent years, the core industrial countries have been increasingly wracked by economic crises and stagnation, further cutting their demand for mining economies' crude ores.

When the world price for its exports collapse, the mining economy's government finds itself saddled with expensive infrastructural and parastatal projects. These require the continued import of parts and materials. Government revenues collapse. Foreign exchange

reserves disappear. The government must borrow funds, at home, stimulating inflation, and/or abroad, incurring mounting foreign debts which it cannot repay as long as its minerals sell only for low prices. Eventually, it must turn to the IMF -- and submit to IMF 'discipline.' Those shaping governmental decisions almost invariably concur with IMF proposals to throw the burden of the ensuing crisis on the peasantry and wage earners: Lay off government employees, raise taxes on lower and middle income families, devalue the currency.

Proposals for solution:

Examination of the above explanations suggests a range of possible solutions. Obviously, ~~none~~ can formulate a blue-print, but the widespread experience of third world mining economies suggests a number of measures to overcome the problems they typically confront. Implementation of these kinds of proposals assumes, however, that those who initially take over state power really do seek -- at least at the outset -- to restructure the national political economy to meet the needs of the majority of the population. This did not seem an unreasonable assumption in many of the African states when they attained independence in the 1960s. ⁶ Yet the explanation above suggests their new governments' efforts to attain development along conventional lines within the framework of inherited institutions almost inevitably shaped a bureaucratic/mangerial bourgeoisie which, in the end, sought only to perpetuate the status quo which gave it power and privilege. The political leaders of countries like Mozambique, Guinea-Bissau and Angola, which came to power through a decade of guerilla struggle, have expressed their determination to restructure their distorted inherited political economies.

Assuming that leaders of a given mining economy likewise sincerely seek to build new political economic structures to meet the needs of

the people, experience elsewhere suggests the necessity, first, of formulating a long-term industrial strategy; and, second, implementing major changes in key institutions. ✓

First, the government, working as closely as possible with the masses of the population in the rural areas as well as in the cities, should formulate a long-term strategy -- say for 20 years -- to increase productive employment opportunities in every sector. In essence, this requires capturing the surpluses produced in the mining sector and reinvesting them in specific projects carefully designed to augment productivity and living standards. Wherever possible, inputs for the mines and associated roads and railroads, as well as housing and consumer goods for the workers, should be produced locally, rather than imported. The resulting increased market should facilitate formulation of physical plans to expand output in other sectors of the economy. Peasants could be encouraged to cooperate to purchase new inputs and expand their output of crops to provide raw materials for new factories and foodstuffs for the growing industrial labor force. Their increased incomes would broaden the domestic markets for new projects' outputs. Small scale industries could be established to process foodstuffs and produce consumer necessities. Factories could be built to produce tools embodying appropriate levels of technology both for agriculture and new small-scale industries.

Over time, basic industries could be constructed: a plant to produce explosives might be linked with fertilizer output; or a factory might be built to produce standardized trucks and public busses, first by assembling imported parts, later producing them in the country. Planners would need to assess the nation's resource potentials, and develop education and training programs to create the kinds of cadres required to provide the necessary tech-

nical and managerial skills. Given the small economic size of many mining economies, furthermore, some of the larger projects might require coordinated planning with neighboring countries.

Various published studies have suggested the kinds of inter-related projects which a mining economy might construct within the framework of its long-term strategy. A lot of experience has been accumulated as to the problems and possibilities. A basic requirement, of course, would be a thorough-going analysis of the particular resource potentials and constraints in the given country. Planners would need to formulate careful physical plans for each project, explicitly detailing its relationship to the overall time sequence, spatial location, and linkages to others to avoid disproportions and ensure viability.

Within the framework of a longterm strategy, the nation's planners would need to formulate specific short term plans, say five or so years (the length of time required to establish a major industrial project and enable it to begin to produce successfully without unplanned losses). In these, they would identify the physical features of each project to be built during in the specific period, spelling out in detail their backwards and forward linkages with the rest of the economy.

Parallel to these physical plans, the planners should formulate concrete financial plans, showing how the investments funds may be mobilized for each project. In addition, they will need to plan for the education of appropriate cadres at each stage in detail.

In the second place, implementation of a longterm strategy of the kind here proposed would require fundamental institutional changes. Unfulfilled and discarded plans abound in third world countries. Analysis of the reasons for their failure reveals the

underlying cause as the attempt to implement them through inherited institutions and structures which were simply inapt for the purpose.

The explanation offered above suggests the necessity of two interrelated sets of institutional changes: those relating to structures of the state machinery designed to assume responsibility for formulating and carrying out plans; and those facilitating participation of the majority of working people in that process.

The inherited government machinery consists of ministries created primarily to build infrastructure, assuming this would stimulate private investors to introduce needed productive activities. Parastatals are typically grafted on as autonomous agencies to fill the gaps private investors leave in the productive structure. Throughout the third world, the inadequate results of planning in this context urge that political leaders design new institutions to enable the state to control what President Nyerere of Tanzania has termed the 'commanding heights': basic industries, export-import and internal wholesale trade, and the banks and financial institutions.

The state should exert direct control over basic industries, in particular the mines which shape the economy and its relations to the world commercial system. The form of control may, of course, vary depending on the foreign 'partner' and the particular circumstances prevailing in the country. That there will be a foreign 'partner' for a prolonged period is almost inevitable. The typical mining economy in Africa has inherited from prolonged colonial rule few technically-qualified men or women to manage the mines; and very limited contact with the world commercial network through which it must sell their output.

A potential mining economy, just entering into production,

Various transnational mining companies based in different countries to discover which will provide the best deal. It may negotiate with one of the socialist countries which are, today, more able than in the past to provide the necessary technologies, markets, and capital in exchange for helping the mining economy to achieve a greater measure of industrial growth.* (Footnote: As developing countries themselves, the socialist countries have had less need for raw materials, less capital, and less advanced technologies than developed capitalist nations; but gradually this situation is changing.) Or it may arrange with a wealthier developing nation with surplus capital to finance the mine and buy its output for a new processing plant in its own country. For example, several oil producing nations plan to utilize their natural gas, formerly simply burned off, to process aluminum, and hence may be willing to finance a mining project to produce the necessary ore, bauxite, or its semi-processed form, alumina. Obviously, the mining economy would need to bargain with any one of these potential partners to get the best possible deal.

The mining economy that 'inherited' a transnational firm which had for years been exploiting both its mineral wealth and its labor force has less choice. ⁹ It cannot easily shift to another 'partner' because the transnational has already installed its own technology and marketing system, geared to the particular way the ore is mined. Getting spare parts for the mines' machinery may be difficult, and it may not be easy to find markets for the particular form in which the ores are exported. On the other hand, the company, too, is to a certain extent trapped. It probably would be willing to renegotiate its relationship with a resolute mining economy

government in order not to lose its existing investments.

For the mining economy to arrive at the best possible arrangement, whether it is entering on a new project or renegotiating its role in relation to an old one, depends crucially on its ability to identify the specific role which the mines can play in helping to realize a carefully formulated longterm development strategy. The issue distinctly is not simply whether the government owns 51 percent or more of the shares of ownership. Country after country has learned to its sorrow that ownership does not necessarily imply adequate control.* (Footnote: Long ago, Berle and Means¹⁰ exposed the fact that in the U.S., ownership of shares in a large corporation does not mean control; the managers of the corporation make the key decisions. In a third world country, government ownership of shares in a transnational corporation's local subsidiary may merely mean that it has paid -- often handsomely -- for the right to share the risks, but it has not obtained adequate control over the management supplied by the parent firm.)

The mining economy must focus its attention on several aspects of the relationship it seeks to establish with its foreign 'partner' to ensure that the mine plays its intended role in overall economic transformation:

1. The share of profits and foreign exchange earnings returned to the government: The mining economy should seek, not only to maximize its returns, but also to avoid bearing the burden of world price fluctuations for its mineral exports in order to plan for orderly reinvestment in restructuring the economy over time. Whether by sharing profits, taxing income, or taking royalties, it will need to ensure that it obtains as regular, steady returns as possible in order to implement its plan without disruption.

As this issue will be discussed elsewhere in this volume, it will not be further considered here, although it is clearly crucial. It is, if anything, more vital that the government does plan to reinvest its share of earnings to implement its long term development strategy designed to reduce its dependence on the mine, the foreign partner, and/or uncertain world markets.

2. The arrangements to train country nationals to take over the management, including specific numbers, skills, and timetables:*

(Footnote: Promised affirmative action to train and upgrade nationals in mining economies, as in the case of women and minorities in the U.S., has turned out to be a cruel joke unless goals and timetables are established and enforced.) The categories of skills required must be specified and agreements reached on how and over what time period nationals are to be recruited and trained for each one.

At the same time, the government will need to ensure that while its nationals acquire appropriate skills, they also are imbued with and committed to the notion that the mines must contribute to the implementation of the nation's long term industrial strategy. This should help to prevent future managers and technicians aspiring to self-advancement rather than national welfare, although by itself, without the necessary institutional changes, it would accomplish little.

3. The construction of dual purpose infrastructure: The government of the mining economy should ensure that, wherever possible, infrastructure built for the mine -- ports, roads, railroads, power-projects, schools for training workers, hospitals or clinics -- will contribute to increased productivity and/or higher living standards throughout the larger community. Even in the construction of infrastructure, government planners may be able to identify technologies and the use of materials which are more appropriate to stimulate

construct a road using local materials and truck haulage, rather than building a rail line out of imported materials straight from the mine to the port. Over time, construction of roads feeding into the main road may facilitate the spread of agricultural and small industrial projects. The training of workers to make repairs on standardized models of trucks might contribute to transport development throughout the economy. Eventually the standardized truck may be assembled in the country itself, and finally the parts, the body and even, after some years, the engine ^(may be) produced locally. Planners need to weigh these kinds of possibilities along with the relative costs of construction and maintenance against the greater efficiency and heavier loads trains may carry.

4. Local production of inputs: Mining projects use a wide range of inputs, from the basic equipment and machines required to blast out the ores, to the food, clothing and housing needed by the mine workers. The foreign 'partners' often conclude it is more efficient to import everything from their home countries, often augmenting their own profits by purchasing them from associated enterprises. Government planners must, however, study which inputs might be produced immediately in the country, stimulating productive employment opportunities in other sectors of the economy; and which ones might be produced over a 20 year period to facilitate the industrial transformation of the entire economy. Obviously, foodstuffs should be locally produced from the outset. This requires careful attention to creating the necessary institutions to provide farmers with marketing, credit, fertilizers and tools and processing facilities so they can increase their output. Within a few years, simple tools like wheelbarrows and parts for some of the simpler mining machines, and even more complex inputs like explosives might be locally produced. By the end of 20 years, it may be possible to produce all

the inputs for which local raw materials are available or can easily be imported, contributing to the growth of domestic industrial capacity.

5. Utilization of outputs: Most minerals require major processing before they can be sold to their final consumers: Iron must be transformed to steel and shaped into rods, beams, tools and machines. Copper must be smelted, refined and fabricated into copper wires and cables, or combined with other minerals to produce electrical fixtures. Bauxite must be processed into alumina, smelted into aluminum and further fabricated into sheets for roofing, doors and window frames, pots and pans, or airplane wings. The typical small mining economy probably will be unable in the early years of industrialization to mobilize the capital or markets to construct processing facilities on a scale large enough to maximize efficiency to produce these items for national use. It might be able to establish more advanced stages of processing if it could arrange to market a major share of its more finished, and hence more valuable, output abroad. Or it might be able to cooperate with neighboring countries in a planned regional development program in which each will build a specific large scale project, based on its own resources, as a pole of growth around which other planned industrial developments could take place. ✓¹²

In formulating a final contract with its foreign partner, a mining economy's Government should weigh all these possibilities and arrange ~~an~~ agreement that will contribute most effectively to stimulating the desired overall balanced, integrated industrial and agricultural growth.

To restructure its distorted mining economy, the government will need to exert adequate control over a second commanding height, the trading institutions, both foreign and internal, especially at the wholesale level. The typical third world nation's exports are almost entirely handled by transnational corporations. The transnational mining firm that operates the country's mines markets the ores that constitute the predominant share of the country's exports. The company usually also imports its own machinery and equipment, often from its associated branches in other countries. ¹³ Transnational trading firms handle most of the other imports of consumer goods, concentrating on the more profitable items purchased by the narrow high income group, as well as machinery, equipment and semi-processed materials utilized in other sectors of the economy. They ~~also~~ often buy these from other subsidiaries of their parent companies, and sell them at the highest possible prices to maximize their profits, indirectly siphoning out a share of the investable surpluses generated in the economy.

The government must institutionalize direct control over these marketing networks to ensure that they broaden overseas markets and obtain the best prices in order to maximize national returns from mineral exports. Simultaneously, they should reduce the import of consumer goods, machinery and equipment to the bare minimum required to complement and supplement the expanding output of industrial and agricultural projects established in accord with the longterm plan. State control will help ensure the prices of goods ~~imported~~ do not include unwarranted profit margins for foreign firms. If several neighboring countries plan together for regional development ~~to~~ make possible the construction of complementary basic industries, as suggested above, each will need to exert direct control over both exports and imports to ensure that it carries out its part of the

regional plan: Each will have to purchase agreed upon-amounts of the others' produce at agreed-upon prices in accord with longterm contracts; and neither can permit undisciplined import of ^{competing} items by private traders seeking to reap higher profits.

Increased state control over the marketing of minerals abroad would facilitate expansion of sales to new markets, including those in competing capitalist, socialist, and neighboring countries. The state trading agency could shop around for the best bargain in terms of prices and longer term contracts which might facilitate planning for reinvestment of surpluses to develop other sectors of the economy. The government could negotiate for sale of produce at more advanced stages of production which the foreign 'partner' might refuse to initiate on its own.*

(Footnote: Transnational firms typically do not invest in processing facilities in third world mining economies, except to reduce initial bulk or transport costs; they prefer to send their ores to their home factories which ensures their ability to retain control over the ultimate marketing networks.)

The state could arrange with other producers of the same minerals to act in concert to regulate output and raise prices along the relatively successful lines of oil producing countries through OPEC, or the less successful approaches attempted by the copper¹⁶ and bauxite exporters.

A state trading agency could halt the expenditure of scarce foreign exchange to import luxury items for the wealthy, and augment the purchase of machines and equipment to implement its longterm industrial and agricultural development. It could shop around for the best sources of supply, perhaps bargaining for an exchange of a part of the nation's mineral exports to obtain needed industrial outputs. Through control of internal wholesale networks, it could ensure the increased distribution of necessities, tools and equipment

throughout the economy, replacing imported items wherever possible by goods locally produced in accord with the national development strategy.

Finally, experience everywhere throughout the third world suggests that the state of a mining economy seeking to implement a longterm development strategy must intervene directly to control a third, little understood commanding height, the banks and financial institutions. These do not, as the layperson often believes, merely provide safe depositories for savings, pension funds, and insurance. Instead, they provide crucial channels for the mobilization and direction of investable surpluses produced in the economy. Too often, acting in concert with the mining and other transnational trading firms with which they are associated, [✓]transnational banks and financial institutions simply siphon these surpluses out of the country -- a major but concealed explanation of the persistent capital shortage which plagues most mining economies despite decades of production and export of rich minerals.

State control and reorganization of these institutions can contribute in several important ways to implementation of a long-term development strategy. First, it can ensure that they mobilize and direct available surpluses within the framework of a carefully designed financial plan to the specific industrial and agricultural projects for which physical plans have been drawn up. Secondly, it can provide a means of checking up on the way the managers of those projects fulfil initial investment plans, and their on-going expenditure of working capital. Over time, the surpluses of these projects will be returned to the banking system for reinvestment in

the projects designed for the next stage of the overall development plan. Eventually, the banks and financial institutions will control and direct the major flow of funds created within the economy for investment; taxation will become decreasingly important, since the state, through these channels, will directly supervise the accumulation and reinvestment in planned projects.

Increased state control over these three commanding heights requires major institutional changes of two kinds. The first involves the shaping of appropriate new institutions to enable the state to maximize the national benefits to be obtained through exercise of its control. Clearly, the old ministries and parastatal forms, inherited from the colonial past, cannot perform the necessary roles; they were designed to leave key decisions to private firms, which only replicated and perpetuated the external dependency relations of the past. Nor is it possible simply to import models from elsewhere. Leading cadres must design appropriate institutional forms in light of the particular problems and their causes, drawing on the growing experiences of other countries pursuing similar paths only for initial guidance.

But a real danger exists here. The cadre assigned to this task must achieve two somewhat contradictory aims at the same time. They need to alter the institutional machinery drastically to perform its required new role; and simultaneously, they must keep it running in order that the economy does not grind to a standstill while the reorganization takes place. In more than one country, keeping the machinery going has dominated the exercise, before long co-opting those who seek to carry it out into the old (often increasingly corrupt) ways shaped by the old working rules of the very institutions they sought to change. The result has been the too-often repeated emergence of a growing bureaucratic/managerial bourgeoisie

wielding state power to advance its own interests.

The individuals themselves may not be to blame. Often they are ill-trained for their jobs. Colonialism did not educate managers for social change, but to perpetuate its (profitable) machine. Often even those sincerely dedicated to their task of reorganization, find themselves caught up in a complex maze of old ways of doing things, pressured by foreign 'partners' with their own agendas. They don't know what else to do. Before long, they cynically give up: They conclude there really is no other way.

Simply to change one set of faces by another, as repeated coups in the few short years since African states attained independence attest, does not resolve the dilemma. (Footnote: The young Ghanaian army officers' solution of simply shooting former governing officials¹⁸ was a logical result of the assumption that individuals -- not institutionalized ways of doing things -- were to blame.)

Various devices introduced elsewhere may help to thwart tendencies towards the emergence of a bureaucratic/managerial bourgeoisie. First, a sharply defined incomes policy must be built into the financial plan to limit the high salaries of new civil service and managerial personnel. In the typical African state, about half the wages and salaries bill is paid to the top 10 percent of all employees, the supervisory and managerial personnel. Officials of newly independent governments, particularly in mining economies where transnational corporate personnel are likely to play a major role for a number of years, argue it would be discriminatory to reduce salaries of Africans below those of expatriate managers or supervisors¹⁹. The ^{latters'} high salaries they insist, are essential to induce them to remain in the country.

Yet these high salaries in reality constitute a significant drain on national funds which might otherwise be used either to raise the wages of those in the lower income brackets or help to finance projects in rural areas to expand productive employment opportunities and raise living standards in less developed regions. The fact that expatriate personnel may remain for some time cannot be allowed to excuse policies building in permanent inequalities, and this prolonged drain of potential investable surpluses. Some countries have, therefore, reduced all supervisory and managerial salaries to levels more commensurate with the nation's ability to pay, and set aside specific allotments, if necessary, to ensure an adequate supply of expatriate personnel until local cadre can be trained to replace them.* (Footnote: Personnel from socialist countries usually do not receive such 'inducement' incomes.)

The national incomes policy should be accompanied by some form of leadership code prohibiting civil servants, managers and political leaders from engaging in speculative real estate, trade, or other private business. Tanzania, Mozambique and Angola^{✓20} have sought to reduce their opportunities to enter such fields by taking over rental housing as well as the major trading channels. These techniques help prevent individuals from utilizing their state jobs to advance their private interests.

Not only do these kinds of measures facilitate the mobilization and direction of investable surpluses to new projects to spread productive employment opportunities throughout the economy; they also help to persuade the much larger numbers of poorer peasants and wage earners that the government and party leaders are serious in their stated goal of restructuring the nation's political economy to fulfil their needs. This may be especially important in a mining

economy where the mines themselves produce a major share of the investable surpluses. Unless the mine workers are convinced that the mine's managerial and supervisory personnel, along with the rest of government, is dedicated to spreading productive employment opportunities to the rest of the population (including members of their own families, and even themselves if the mines are forced to cut back on employment due to world market conditions), they are likely to press for higher wages. In country after country, mine workers, whose wages constitute a relatively small share of total mining costs (typically less than 25 percent), have pressed for and won wages well above those of workers in other sectors of the country. This tends to create a privileged aristocracy of labor and spurs other workers to demand wage increases that cannot be paid without threatening ^(to halt) the spread of industrialization throughout the economy. But no government or political leaders can expect to retain a shred of legitimacy when they ask workers to restrain their wage demands if, at the same time, they themselves are seen to be living at levels far above those of the miners themselves.

Above all, the difficulties of remaking the institutions and working rules while keeping the machinery of state going renders imperative the discovery of ways to enable the bulk of the population -- the wage earners, the peasantry, the growing numbers of un- and under-employed -- to exert on-going constructive pressures on those in charge of running the state. Those who stand to gain from the changes to be made must be able to participate in decision-making, forcing through the essential changes needed at all levels to implement the long term development strategy. ^{21/}

Here again a contradiction emerges: How can the masses of the working people, many if not most of them without even the simple

skills of reading and writing, participate in essential decisions relating to such highly complex national and international mechanisms as those of a modern mining industry -- far less all the intricate associated institutions of foreign trade and money and banking? It is one thing to create village democracy, ousting colonial appointees and traditional rulers to given men and even women* (Footnote: In Mozambique, Angola and Guinea-Bissau, the

political leadership realized early in the decade of guerilla warfare that women, who produced most of the food and played a crucial role in the families, must be involved in the struggle directly by guaranteeing their participation in decision making at all levels.)

a decisive say in how their village, in which they were born and brought up, should be run. But how is it possible for them to understand the impact on their lives of that far-away mining project, tied into a still more remote world commercial network? How can they learn what must be done about it?

In Mozambique and Angola, the liberation movements, having won a decade of guerilla war by mobilizing the working people and peasantry, have concluded that the solution to this contradiction lies in the creation of a vanguard party whose members will understand and educate the masses of the people. This, in itself, requires continual vigilance in building the structures of the party itself to ensure that its members remain dedicated to the national political and economic transformation envisaged.

Inevitably, this process of change will take time. There will undoubtedly be a prolonged struggle, characterized by the old adage, 'two steps forward, one step back' as new techniques are devised to engage people at all levels in a participatory process of radically restructuring the institutions shaped by powerful mining companies and their associated trading and financial interests.

Summary:

The typical African mining economy has inherited an externally dependent dualistic economy dominated by transnational firms that provide the sophisticated technologies, manage the mines (whether or not they own them), market their ores, and drain out a significant share of their investable surpluses. Efforts to attain development with at most marginal changes of these institutions, shaped during the decades of outright colonialism, have too frequently fostered the emergence of a bureaucratic/managerial bourgeoisie eager to perpetuate the status quo. Meanwhile, the vast majority of the population vegetates in impoverished hinterlands or overcrowded shanty compounds. When recessions grip the core industrial nations, deepened poverty spreads throughout the ^{dependent} mining economy as living costs soar and growing numbers of workers lose their jobs....

Analysis of the underlying causes of this pervasive impoverishment of the populations of mineral-rich African states suggests that they are embedded in the inherited institutional structures and working rules which leave their political economies geared to the uncertain world markets for their mineral exports under the control of transnational mining firms, and associated banks and trading institutions. This suggests the necessity of action by the state -- the only agency capable of taking such action -- to formulate a long-term industrial strategy to restructure the economy to provide productive employment opportunities and raise living standards in every sector. To implement this strategy, the state must exert direct control over the commanding heights: the basic industries, especially the mines; foreign and internal trade; and the banks and financial institutions. This, in itself, will require fundamental reorganization of the state structures, themselves.

The political leadership which seeks to make these changes must impose an incomes policy and a leadership code to prevent the growing corps of government employees from taking advantage of their new positions of power. They will, simultaneously, need to involve the working people -- most of whom have at the outset little if any knowledge of the basic issues to be dealt with, far less what to do about them -- in the planning process. They may decide, as have Mozambique's and Angola's leaders, that this requires building a vanguard party.

But clearly this process of re-shaping and in some cases completely replacing existing institutions and working rules will be far from easy. Yet unless it is tackled, it is equally evident that the majority of the peoples of Africa's mining economies -- like those of Latin America before them -- are likely to be condemned to lives of grinding poverty.

References:

1. This structure is analyzed in A. Seidman, *Natural Resources and National Welfare: The Case of Copper* (New York: Praeger, 1976). It should be emphasized that to describe the economies of mining countries as dualistic is not to explain why they are that way. This author completely rejects explanations like that of Boeke which seeks to blame the attitudes, values and institutions of the people.
2. This has been repeatedly introduced in Africa, and most recently in Zambia's case; see the International Monetary Fund, *Financial Statistics, 1979*, for the size of the IMF loans and the extent of devaluation. See C. Payer, *The Debt Trap* (New York: Monthly Review, 197) for analysis.
3. Eg. see A. Seidman, "Zambia's Distorted Import Substitution Industry," *Journal of Modern African Studies*,
4. Cf. R. Dumont, *False Start in Africa* (London: Deutsch, 1966); see also R. Wraith and E. Simpkins, *Corruption in Developing Countries* (London: Routledge and Kegan Paul, 1963). R. Sklar, referring to the managers of Zambia's rapidly expanding parastatal sector, characterized them as a "managerial bourgeoisie." For extensive discussion of reasons for their emergence, see R.B. Seidman, *The State, Law and Development*, (New York: St. Martins Press, 1978) Ch. 20.
5. Zaire and Zambia were prime examples in the late 1970s as copper prices plummeted in real terms to record lows.
6. Otherwise, one would have to / claim Nkrumah, Kenyatta, Kaunda, Obote and Azikwe - to name a few - were all hypocrites. That seems unlikely.
7. The ingredients of a long term strategy and the kinds of institutional changes required are detailed in A. Seidman, *Planning for Development in Sub-Saharan Africa*, (New York: Praeger and Dar es Salaam: Tanzania Publishing House, 1974). How laws might be formulated and implemented to achieve this goals is discussed in R.B. Seidman, *The State, Law and Development*, op. cit.
8. Eg. Guinea Bissau, considering the possibilities of producing bauxite and/or alumina for export, could evaluate the alternative advantages and disadvantages of choosing among the six major aluminum companies that dominate western world production; the oil countries which sought to process alumina to aluminum as a means of utilizing their otherwise wasted natural gas; and the socialist countries. (See Economic Development Bureau report to the Government of Guinea-Bissau, New Haven, 1979).
9. Eg. Seidman, *Natural Resources and National Welfare*, op. cit., discusses the problems confronting the copper exporting countries and their efforts to adopt different strategies.
10. Berle and Means,

11. See G. Simwinga, Ph.D. Thesis on Africanization on Zambia's mines after government acquired 51 percent of the shares (University of Pittsburgh, 1975).
12. These possibilities are being considered by the Front Line States in Southern Africa through the medium of the mechanisms created at the Arusha Southern African Coordinating Conference, July, 1979 (Arusha: papers from the Southern African Coordinating Conference, 1979).
13. Anglo-American Corporation, for example, actually flew in machinery and equipment for its mines from South African plants, using air freight, after Zambia closed its rail line through Rhodesia in compliance with the UN sanctions.
14. The exception is when the transnationals ship their crude materials to regional subcenters like South Africa, where they themselves have not infrequently invested in next stage processing facilities. About 80 percent of U.S. manufacturing companies' investments in all of Africa are concentrated in South Africa; and U.S. mining firms ship ore's from neighboring countries like Namibia and Botswana to its plants there in several cases for further processing. U.S. firms with oil wells in a number of African countries do their major oil refining on the continent in South Africa. (See U.S. Department of Commerce, Survey of Current Business, annually reports on U.S. investments abroad by sector in the August or September issue. Washington: Government Printer, monthly).
15. For obstacles to increased copper country coordination of prices and exports, see Seidman, Natural Resources and National Welfare: The Case of Copper, op. cit.
16. Eg. Barclays Bank DCO and Standard and Chartered Bank both tend to dominate the banking sectors of most of the former British colonies. On their boards of directors sit a number of directors of major mining companies. For example, Anglo-American Corporations (of South Africa) is represented on the Barclays' board by its chairman. Both Barclays and Standard do a major share of their banking business in South Africa, as well, where together they own about two thirds of the assets of the largest 20 banks. A third bank with important holdings in Central and East Africa is National Grindlays Bank, affiliated to the British parent bank of that name, in which the second largest U.S. bank, Citicorp, owns 49 percent of the shares. A number of U.S. mining company representatives sit on Citicorp's board, as well. Citicorp also owns 49 percent of one of the two French banks that dominate the commercial banking sectors of the former French colonies in Africa. (See M. Makgetla and A. Seidman, The Activities of Transnational Corporations in South Africa, New York: United Nations Committee Against Apartheid).
17. The problems and possibilities in this respect are analyzed in R.B. Seidman, The State, Law and Development, op. cit.
18. New York Times, July 1, 1979

19. This argument was advanced before the incomes commission appointed by the Zambia Government in 1973 in which this author was appointed.
20. These countries policies are summarized in C. G. Rosberg and Thomas M. Callaghy, Socialism in Sub-Saharan Africa - A New Assessment (Berkeley: Institute of International Studies, University of California, 1979)
21. The problems and possibilities of achieving participatory institutions in Africa are discussed in detail in R.B. Seidman, The State, Law and Development, op. cit., esp. Ch. 21.
22. The author discussed this issue with the head of the Guinea-Bissau Women's Commission, who emphasized the need to continue to press for women's participation in managerial and supervisory posts in projects like the proposed mining project. Sephanie Urdang has reported on the status of women in these countries in her recent book.
23. See, eg., Mozambique Information Agencies, Special Congress Issue, Bulletins No. 9 and 10 (Maputo: 1977)

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